



## Science Toolkit: Grade 5 Objective 1.B.1.a

Student Handout: Science: Grade 5 Objective 1.B.1.a

Standard 1.0 Skills and Processes

Topic B. Applying Evidence and Reasoning

Indicator 1. Seek better reasons for believing something than "Everybody knows that..." or "I just know" and discount such reasons when given by others.

Objective a. Develop explanations using knowledge possessed and evidence from observations, reliable print resources, and investigations.

Selected Response (SR) Item

Question

Use the passage '[Hazy Summer Days and Air Pollution](#)' to answer the following question.

Alison Davis states that air quality has been improving because of the Clean Air Act.

What evidence would help support her statement?

- A. a decrease in breathing disorders
- B. a decrease in the height of trees in forests
- C. an increase in the number of cars on the road
- D. an increase in the number of days with air that appears brown

Correct Answer

- A. a decrease in breathing disorders

Question

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## Handouts

## Hazy Summer Days and Air Pollution

Have you noticed that on some hot summer days the sky can look brownish instead of clear blue? Pollution causes poor air quality—and it can be bad for your health.

Scientists say that haze and smog are the problem.

"Smog comes from two words, smoke and fog," said Alison Davis of the U.S. Environmental Protection Agency. Both haze and smog are caused largely by pollution from sources like power plants, factories, cars, and even wildfires.

Particle pollution is one type of pollution that affects air quality. The pollution is caused by tiny particles thrown into the air by factories and other sources. "If you took a grain of table salt.... That's 40 times bigger than the biggest [tiny particle]," Davis said.

While something so small might seem harmless, Davis explained that the particles can get deep into your lungs and even affect your heart.

Air pollution from particles and other sources like ozone can also hurt trees and animals. Ozone is created when pollution from places like factories combines with sunlight.

The summer usually has the worst air quality, because there is more sunlight. Sunlight reacts with pollutants to create ozone. Ozone is helpful high in the atmosphere, because it helps block the sun's harmful rays. But down closer to Earth, ozone can be harmful to people.

According to Davis, air quality in general has been improving in the United States. In 1970, the U.S. passed the Clean Air Act. "The act has helped make the air cleaner," Davis said. In London, England, the air used to be so dark and polluted that cars would have to drive with their headlights on in the middle of the day!

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"Hazy Summer Days and Air Pollution" by Sarah Ives, National Geographic Kids News. July 27, 2004  
(<http://news.nationalgeographic.com/kids/2004/07/Hazysummer.html>)